

# Review of net zero: call for evidence

## Consultation response

27 October 2022

### Summary

- Decarbonising England's 2.8m housing association homes will mean warmer, more comfortable homes and lower bills for residents.
- Housing association homes are already the most energy efficient of any tenure, with most housing associations aiming to ensure all their homes reach EPC C by 2030 at the latest.

Net zero is an opportunity to create jobs, stimulate the economy and end fuel poverty. IPPR modelling suggests that if the government invested £7bn in retrofit each year, it could sustain almost a million direct and indirect jobs by 2030.

- A sustainability strategy focused on retrofit and installation of heat pumps would decrease the United Kingdom's reliance on imported gas and thereby increase our energy security.
- Housing associations plan to invest £70bn in their existing homes by 2050, but we estimate that they will need at least an additional £36bn to meet the net zero target. This represents an enormous contribution to local jobs and growth across the country.
- Key challenges remain, particularly related to financing retrofit projects. This has been exacerbated by the current economic environment, with costs of materials and construction outstripping inflation.
- In partnership with the government, the social housing sector has the purchasing power and strategic capacity to lead the development of supply chains, skills and job creation across the whole retrofit industry. But we would like reassurance over the long-term regulatory and funding environment for retrofit and decarbonisation projects. This would increase market confidence and stimulate the supply chain.

## Introduction

The National Housing Federation (NHF) is the voice of housing associations in England. Housing associations are not-for-profit organisations providing 2.8 million homes for six million people in every council area of England.

Housing associations are committed to the net zero target and to decarbonising their homes by 2050. Housing association homes are already more efficient than homes of other tenure types: [64.3% are certified EPC C or above](#), compared with 38.3% of privately rented homes and 35.6% of owner-occupied homes.

This response covers some of the questions set out in the Department for Business, Energy and Industrial Strategy (BEIS) consultation, [Review of Net Zero: Call for evidence](#) published 29 September 2022. Our response focuses on the current policy environment around net zero, particularly in relation to retrofit and the installation of clean heat technologies in social homes. It is informed by discussions with our housing association members, as well as industry experts.

If you have any questions about this submission, please contact Ewan Fulford, Policy Assistant at the National Housing Federation ([Ewan.Fulford@housing.org.uk](mailto:Ewan.Fulford@housing.org.uk)).

## Questions

### **1. How does net zero enable us to meet our economic growth target of 2.5% a year?**

Retrofitting homes is a key priority for housing associations, with ongoing work on insulating homes and installing clean energy sources. The primary benefactors of this work are residents, who are able to live in well-insulated homes that are cheaper to heat.

Increased gas prices have led to improved cost benefits related to running electrified, low-carbon heat sources. The Energy and Climate Intelligence Unit suggests that, as of May 2022, [homes with heat pumps, high levels of insulation and electric vehicles are saving around £1,000 per year](#) compared to homes with gas boilers, average insulation and petrol cars. This is additional income that households could spend in their local communities.

On a macroeconomic scale, the IPPR report, [Train local, work local, stay local: Retrofit, growth, and levelling up](#) published 21 September 2022, explores the relationship between levelling up and retrofit. By modelling data from the Climate Change Committee, and assuming a governmental spend of £7bn per year, they suggest almost a million direct and indirect jobs could be sustained by 2030. By 2050 this could be up to 1.8 million jobs. They calculate Gross Value Added to be around £160bn by 2050. Additionally, local training programmes targeted in areas most in need of green home adaptations would see red wall seats, coastal towns and former industrial areas benefiting the most.

Similarly, research carried out earlier this year by Cambridge Econometrics on behalf of Greenpeace, found that the transition from high-carbon heating technology to low-carbon alternatives would lead to the [creation of 138,000 jobs and £6.8bn growth in GDP by 2030](#).

It is our view that reaching net zero is a generational opportunity to increase energy security, protect residents from fuel poverty and create new jobs. As the above research demonstrates, while there may be short-term costs associated with retrofit programmes, the medium and long-term effects are highly beneficial to the UK economy.

## **2. What challenges and obstacles have you identified to decarbonisation?**

Through discussions with members who have carried out retrofit work, we have identified several challenges related to retrofitting social homes. We believe these challenges can be overcome through government intervention, increased innovation and additional funding.

### **Economic environment**

The primary challenge faced by our members is the economic environment. Research from Savills on behalf of the NHF shows that the cost of decarbonising existing housing association stock by 2050 will be at least [an additional £36bn on top of the £70bn that housing associations already plan to invest](#) in their homes over that time. This research was published prior to the high levels of inflation we have seen in recent months and it is likely the costs will now be higher. As stated by the Centre of Economics and Business Research, [housing association costs are rising higher than inflation](#), with material and construction costs particularly affected.

Housing associations have greatly benefited from the Social Housing Decarbonisation Fund (SHDF), with applications for Wave 2.1 forthcoming. Likewise we have received positive feedback related to the [Social Housing Retrofit Accelerator](#).

However, members have identified issues, particularly related to collecting the data requested by BEIS for SHDF applications. For smaller housing associations, this can be a costly exercise, with one organisation reporting a £300 charge to survey a single property. This is an inhibitive cost given the size of the organisation. Some members have expressed frustration with the 50% match funding for the cost and effort required to collect this data.

Housing associations are likely to face [reduced income from residents in the coming year, as highlighted by our response to the rents cap consultation](#) published 13 October 2022. This may impact the ability of housing associations to carry out net zero work due to competing priorities, including fire safety, maintenance and building new homes.

### **Supply chains**

Members have reported that sourcing firms to carry out retrofit work can be difficult due to a shortage of PAS 2035 qualified staff. This disproportionately impacts smaller housing associations, who may not have the financing or projects large enough to compete with larger organisations.

We have been consistent in calling for long-term certainty over retrofit funding to build strong supply chains through a commitment to retrofit past 2030, as well as a front-loaded release of some SHDF funds.

Similarly, as highlighted by Ashden earlier this year, [supply chains would benefit from long-term policy certainty](#). In the absence of a clear national plan, the market may lack the certainty needed to properly invest time and money into green technologies and skills.

This is also applicable to issues such as reform of EPC standards. Though reform has been mooted in the past decade, the social housing sector requires clarity over any planned actions related to EPC ratings to ensure that the standards housing associations are working to remain relevant.

As highlighted by our answer to question three, the shortage of appropriately trained staff may be addressed by creating new training opportunities at a local level.

### **Hard to decarbonise homes**

In July 2022, the NHF and Parity Projects published a report on [homes that may be hard to decarbonise](#).

The findings were generally positive, with only 2% of social homes defined as technically hard to decarbonise at present. Key issues include the technical features of certain homes, including older homes which lack cavity walls, homes with inaccessible lofts, and building blocks of mixed tenures.

We hope that with evolving technology, there will be solutions to retrofitting these homes by 2050. As with the previous section of this answer, it is likely that solutions will only be found to these issues through continued investment and innovation in the retrofit sector.

Planning constraints were also a prohibitive feature, an issue we discuss in detail in our answer to question 26.

### **3. What opportunities are there for new/amended measures to stimulate or facilitate the transition to net zero in a way that is pro-growth and/or pro-business?**

Investment in green skills can promote a transition to net zero that is viable and pro-business. However, there are concerns that the UK is not yet moving fast enough to take advantage of this opportunity. A representative example of this is the installation of heat pumps.

Heat pumps are likely to be the primary low-carbon domestic heating source if we are to reach net zero by 2050, with [research around alternatives such as hydrogen suggesting limited domestic use](#). Despite this, a 2020 impact assessment found that around [1.7 million gas boilers are still sold each year](#) in the UK, compared with [just 69,000 heat pumps installed in the UK in 2021](#), as estimated by the Heat Pump Association. There are several reasons why heat pump installation is so far behind gas boiler installation, including cost and consumer awareness, which the government has sought to tackle through schemes such as the [Boiler Upgrade Scheme](#).

The government has set a target of [600,000 heat pump installations each year by 2028](#) but there are a limited number of staff qualified to carry out this work. Heat pump installers must be registered through the Microgeneration Certificate Scheme (MCS). At present, Nesta estimate [there are only around 3,000 trained heat pump engineers in the UK](#). The number of MCS qualified heat pump engineers needs to be around 27,000 to reach the 600,000 target. This is a huge challenge, compounded by an aging workforce, with only 6% of registered gas engineers under the age of 35.

As highlighted by Ashden, there are [several housing associations and local authorities working to address these skills gaps](#), seeing them as an opportunity to train young people and launch localised retrofit schemes. Stockport Homes Group has been working in partnership with construction training provider [B4Box](#). Skills training makes up part of contracts between the housing association and B4Box, providing continuous training opportunities. B4Box will only train people who live within five miles of the construction site, with focus on engaging disadvantaged young people such as care leavers and ex-offenders.

There is a clear market need for more qualified heat pump engineers, however this sector may need further stimulation. As highlighted in question two, we would like to see long-term funding commitments to build market confidence in retrofit. The Nesta research suggests appointing a body to oversee the growth of this market in collaboration with training providers, colleges and the industry.

#### **4. What more could government do to support businesses, consumers and other actors to decarbonise?**

In 2021, the NHF published a [guide to decarbonisation for housing associations](#), which suggests a 'fabric first' approach, improving the efficiency of a building before moving onto replacing gas boilers with low-carbon alternatives such as heat pumps. This approach has been adopted by housing associations carrying out decarbonisation work. It is worth noting, as the guide points out, that social housing is already the most carbon efficient of any tenure type in England, with 64.3% of properties rated EPC C or higher.

Housing associations have the scale, purchasing power and long-term stake in homes and communities necessary to spearhead the decarbonisation of the UK's homes. In the right regulatory and financial space, our members have the purchasing power and expertise to help develop robust supply chains, skills and delivery models to help deliver retrofit at a large scale.

Forums such as the Net Zero Building Council have offered an opportunity for a wide range of stakeholders to form partnerships, share examples of best practice, and to contribute to the policy environment. We would welcome the continuation of such forums to ensure that the challenge of net zero can be tackled with all sectors in mind.

In relation to consumers, the social housing sector knows the importance of engaging residents in conversations about retrofit and adaptations to their homes. In November 2021, [Placeshapers published a report on how to bring residents on board with the net zero journey](#). The report focuses on internal measures such as building trust with residents, ensuring staff have good knowledge of green adaptations, and communicating effectively. Alongside these measures is a request for the government to launch a nationwide information campaign around net zero and how residents can help with the challenge. The NHF would welcome such a campaign.

## **25. What has worked well? Please share examples of any successful place-based net zero projects.**

Kate Henderson, CEO at the NHF, recently visited [housing projects funded by the Social Housing Decarbonisation Fund](#). Among them was Orbit Homes, who used funds from the pilot project to retrofit 69 bungalows with external wall insulation, double-glazing, ventilation and many other measures. By all accounts, these measures had been incredibly successful.

Similarly, during one of Kate's visits, she spoke with a resident who explained, 'It feels like a new home, I feel like I've won the lottery'. Residents are already benefiting from warmer homes and cheaper heating. In summer, during the heatwave, another resident said they had not even needed to open a window or use a fan, such was the successful design of their building. It is vital that we see this work continue so that social housing residents continue to benefit from these schemes.

## **26. How does the planning system affect your efforts to decarbonise?**

As identified in the NHF's [report on social homes that are hard to decarbonise](#), planning constraints are a barrier to retrofitting existing homes. Since the report's publication, we have carried out further research through discussions with housing associations and planning agencies.

The Climate Change Committee estimates that [around 4.5% of total housing stock may be inhibited by planning constraints](#), whilst the Build Back Britain Commission recently calculated that [1.3% of socially rented homes are located in conservation areas](#), though this figure is unlikely to include all protected homes.

Many social homes may be designated heritage assets, located in areas of outstanding natural beauty, conservation areas or World Heritage sites. Others may be non-designated heritage assets, having been identified by Local Planning Authorities (LPAs) as having special architectural interest, or otherwise protected by Article 4 Directions. Retrofit work, which might otherwise fall under Permitted Development Rights such as installing external wall insulation or air source heat pumps, can be limited in these areas, requiring costly planning permission applications that may be rejected.

This is compounded by the fact that LPAs, the bodies which make decisions related to planning applications, are often under resourced. In 2019, research from the Royal Town Planning Institute found that [real terms funding for planning departments had fallen 42% over the previous decade](#). The impact of this on planning applications can be profound. Members have reported that decisions related to planning permissions frequently exceed the eight and 13 week deadlines – sometimes by months. Decisions are often inconsistent, with one planning consultancy reporting different decisions for identical works to very similar buildings on the same estate.

Our members have found LPAs do not always readily share data related to protected homes and areas, which can complicate decisions around planning and funding of retrofit projects.

Consequently, the NHF would like to see:

1. A stronger link between sustainability and planning in the [National Planning Policy Framework](#), particularly in Chapter 14.
2. A redefinition of 'harm' in relation to heritage buildings that ensures LPAs account for the impact of the climate emergency on planning decisions affecting heritage homes.
3. Additional training for LPA staff. This could be delivered through the retrofit academy.



4. Additional funding for LPAs. This is particularly pertinent with the launch of Wave 2.1 of the Social Housing Decarbonisation Fund because LPAs are likely to receive a large number of planning applications in the near future.

This is an active area of work for the NHF and we would welcome any opportunities to discuss this with the Department of Levelling Up, Housing and Communities as well as BEIS.

## **28. Are there any other implications of net zero or specific decarbonisation projects for your area that the Review should consider?**

Housing associations across England are investing in greening their communities, as well as their businesses. For example, the Guinness Partnership have become the [first housing association to create a 'tiny forest'](#) as part of their green strategy. Guinness have rightly recognised that net zero is an opportunity to work alongside residents and build sustainable communities. They have planted over 600 trees and shrubs in Crewe with engagement from residents.

Similarly, housing associations such as Stonewater have begun installation of the equipment needed for [electric vehicle charging points](#) in their new and existing developments. Our members are approaching net zero holistically, with not only their homes in mind. There is an understanding that to reach net zero, a broad approach is needed.

Though at a small scale, we highlight this work to demonstrate that decarbonisation is often holistic and community-based. We should not only focus on the economic benefits of this work, but also on how it is related to community engagement, green measures and creating pleasant places to live.

There are countless examples of housing associations rewilding, creating green community spaces such as allotments and bringing residents along on the net zero journey. This serves as a reminder that, at the heart of the UK's net zero ambitions, resident experience must be prioritised, whether that is through green community spaces, or reducing bills and increasing warmth.